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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,059	06/06/2001	Erskine R. Barbour	ABMS-0122/B010420	7848
23377	7590	03/03/2004	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET PHILADELPHIA, PA 19103			TERESINSKI, JOHN	
			ART UNIT	PAPER NUMBER
			2858	

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/875,059

Applicant(s)

BARBOUR ET AL.

Examiner

John Teresinski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Amednment filed Nov. 1, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,8,10-16 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,8,10-14,16 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 15 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-5, 7, 8, 11-13, 16, 24, 25 and 26 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6,291,911 to Dunk et al..

Regarding claim 8, Dunk et al. disclose a device for controlling a magnetic actuator including a power supply (column 6 lines 15-20), at least one actuator drive circuit adapted to provide a series of modulated current pulses to the magnetic actuator (column 6 lines 53-67), the actuator being connectable to the power line in the high voltage electrical distribution system (column 1 lines 28-40) within the power switching device (column 3 lines 20-30); and a microprocessor for monitoring the series of modulated current pulses to determine whether to modify the magnitude of the modulated current pulses (column 3 lines 21-25).

Regarding claim 1, Dunk et al. disclose modifying the first magnitude of the first series of modulated current pulses (column 10 lines 35-40) and applying a second series of modulated current pulses having a second magnitude through the coil of the magnetic actuator such that the actuator moves from a first position to a second position (column 10 lines 35-40, 46 and Fig. 8A).

Regarding claims 2 and 3, Dunk et al. disclose applying a series of modulated current pulses through the coil of the magnetic actuator in a second direction such that the actuator

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moves from the second position to a third position/back to first position (column 10 lines 35-40, 46 and Fig. 8A).

Regarding claims 4 and 5, Dunk et al. disclose comparing the current level with a threshold value and determining, based on the comparison, whether to continue applying a series of modulated current pulses through the coil of the magnetic actuator in a first direction such that the actuator moves from a first position to a second position. (column 6 lines 53-67).

Regarding claims 7 and 24, Dunk et al. disclose a power switching device controller adapted to apply a voltage across the coil for a predetermined interval of time, measure a current value in the coil during a portion of the predetermined interval of time, determine an impedance value for the coil based on the current value, compare the impedance value for the coil to a threshold impedance value for the coil and determine, based on the comparison, a characteristic of the magnetic actuator (column 10 lines 57-65).

Regarding claim 11, Dunk et al. disclose a recloser controller and the power switching control device is a recloser (column 11 lines 30-31).

Regarding claim 12, Dunk et al. disclose a direct current power supply (column 6 lines 13-21).

Regarding claim 13, Dunk et al. disclose an alternating current power supply (column 6 lines 23-27).

Regarding claim 16, Dunk et al. disclose a controller housing (column 5 lines 40-44) and an energy storage capacitor contained within the controller housing for storing the energy to be delivered to the magnetic actuator (column 5 lines 13-20).

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Regarding claims 25 and 26, Dunk et al. disclose monitoring the position of the armature in the magnetic actuator (column 7 lines 1-9).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunk et al..

Regarding claim 10, Dunk et al. disclose a control device with multiple settings for tunable current (column 10 lines 35-40, 46). Dunk et al. does not specifically disclose a low, medium and high setting. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a low medium and high setting into Dunk et al. for the purpose of executing switching commands more efficiently (column 6 lines 40-50).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunk et al..

Regarding claim 14, Dunk et al. disclose a device for controlling a magnetic actuator (column 6 lines 53-67). Dunk et al. does not disclose three actuator control circuits. Although Dunk et al. does not disclose a duplication of control circuits, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide three control circuits since the mere duplication of parts has no patentable significance unless a new and unexpected result is produced (MPEP 2144.04, In re Harza).

***Allowable Subject Matter***

Claims 15 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Regarding claim 15:

The primary reason for indicating allowable subject matter in claim 15 is the inclusion of the power supply being programmable between 150 and 250 VDC. It is these features found in the claim, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Regarding claim 27:

The primary reason for indicating allowable subject matter in claim 27 is the inclusion of a voltage regulator electrically connected to the microprocessor, the voltage regulator adapted to switch between a linear mode and a switching mode. It is these features found in the claim, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

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Applicant's arguments with respect to claims 1-5, 7, 8, 10-16, and 24-27 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Teresinski whose telephone number is (571) 272-2235. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (571) 272-2233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JT

JT

February 18, 2004



**N. Le**

**Supervisory Patent Examiner  
Technology Center 2800**